

Updates to Missouri WQS

- ◆ Protection of Aquatic Life
 - Cadmium, Chromium III, Chromium VI, Copper, Lead, Nickel, Silver, Zinc are recalculated.
 - Equation-based criteria.
 - Table based on lowest hardness value in a given range
- ◆ Mixing Zones (4)(A)[5.]4.B.(I)(a)
 - “Class C streams and streams with seven (7)-day Q10 low flows of 0.1 cfs or less.”
 - Deleted “Class C streams.”
 - Based on flow--not classification of stream.
 - Mixing zone allowance removed.

Metals Criteria - Example: Cadmium (μg/L)

		[Hardness]		
		[<125	125-200	>200]
<i>[chronic:</i>				
	CWF	1.1	1.4	1.8
	Lakes	9.1	9.1	9.1
	GWWF	9.1	11.8	15.5
	LWWF	11.8	16.4	20
<i>acute:</i>				
	CWF	3.7	5.9	8.1
	Lakes & GWWF	31	49	68
	LWWF	43	68	94]

Acute: $e(1.0166 \cdot \ln(\text{Hardness}) - 3.062490) * (1.136672 - (\ln(\text{Hardness}) * 0.041838))$

Chronic: $e(0.7409 \cdot \ln(\text{Hardness}) - 4.719948) * (1.101672 - (\ln(\text{Hardness}) * 0.041838))$

Mixing Zone Revisions

(I) [Class C streams and s] Streams with seven (7)-day Q10 low flows of less than 0.1 cfs [or less].

(a) Mixing zone. [length of one-quarter (1/4) mile.

If multiple discharges affect a reach or if zone of passage requirements mandate less extensive mixing zones, shorter mixing zones may be required.] not allowed; and

(b) Zone of initial dilution. not allowed;

Updates to Missouri WQS

- ♦ Missouri Register

- <http://www.sos.mo.gov/adrules/moreg/current/2005/v30n9/v30n9c.pdf>

- ♦ Water Protection Program

- <http://www.dnr.mo.gov/wpscd/wpcp/rules/wpp-rule-dev.htm>
 - (573) 751-1300